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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,240	03/24/2004	Katsushi Matsumoto	250673US0	4533
22850	7590	10/05/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER	
			MORILLO, JANEL COMBS	
			ART UNIT	PAPER NUMBER
			1742	
			NOTIFICATION DATE	DELIVERY MODE
			10/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/807,240

Applicant(s)

MATSUMOTO ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US 6,231,809).

Matsumoto teaches an Al-Mg-Si alloy sheet with 0.2-1.5% Mg, 0.2-1.5% Si, one or more of 0.01-1.5% Total Mn, Cr, Fe, Zr, V, and Ti, and 0.01-1.5% Cu or Zn (abstract), which overlaps the presently claimed ranges of Mg, Si, Fe, Mn, Cr, Zr, V, Cu, Zn, Ti (cl. 1-6).

Though Matsumoto does not mention the deviation in texture every 500 μm along the width direction (cl. 1) or sizes of textures (cl. 4), Matsumoto teaches said Al-Mg-Si alloy sheet is fabricated by working and heat treating to produce a sheet without ridging marks (examples, Table 5). Because Matsumoto teaches a substantially overlapping Al-Mg-Si alloy processed in a similar method of rolling and heat treating, and obtaining a sheet product without ridging marks, then substantially the same amount of texture dispersion is expected for Matsumoto as for the instant invention. Therefore, it is held that Matsumoto has created a prima facie case of obviousness of the presently claimed invention.

3. Claims 1-6 rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US 6,334,916).

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Matsumoto'916 teaches an Al-Mg-Si alloy sheet with 0.1-2.0% Mg, 0.1-2.0% Si, one or more of 0.01-1.5% total Mn, Cr, Fe, Zr, V, and Ti, and $\leq 1\%$ Cu or $\leq 1\%$ Zn (column 2 lines 50-65)), which overlaps the presently claimed ranges of Mg, Si, Fe, Mn, Cr, Zr, V, Cu, Zn, Ti (cl. 1-6).

Though Matsumoto'916 does not mention the deviation in texture every 500 μm along the width direction (cl. 1) or sizes of textures (cl. 4), Matsumoto'916 teaches said Al-Mg-Si alloy sheet is fabricated by working and interannealing to transform non-uniform structure to make into homogeneous recrystallized structure (column 8 lines 10-13). Because Matsumoto'916 teaches a substantially overlapping Al-Mg-Si alloy processed in a similar method of rolling and interanneal heat treating to produce a uniform structure(see Ex. Table 3), thereby obtaining a sheet product with excellent deep drawability, then substantially the same amount of texture dispersion is expected for Matsumoto'916 as for the instant invention. Therefore, it is held that Matsumoto'916 has created a prima facie case of obviousness of the presently claimed invention.

Response to Amendment

4. In the response filed on July 11, 2007, applicant amended claims 4-6 as well as withdrawn claims 7-11. The examiner agrees that no new matter has been added.

5. Applicant's argument that the present invention is allowable over the prior art of record because applicant has shown unexpected results has not been found fully persuasive. The examiner agrees that applicant has shown a synergistic effect occurs when a) a composition of 0.4-1.9% Mg and 0.2-1.9% Si (see Table 1), b) exhibits a crystal grain size of $\leq 50 \mu\text{m}$ AND c) standard deviation $< 1\%$. However, the claimed composition ranges are not clearly commensurate

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in scope with the above mentioned ranges present in Table 1 of the specification. Additionally, the synergistic effect of low ridging appears to be a combination of both crystal grain size and standard deviation average (i.e. there are no examples of only crystal grain size or only standard deviation resulting in good ridging characteristics). Therefore, a nexus between the results in the specification and the presently claimed invention has not clearly been made.

6. Applicant should establish a nexus between the rebuttal evidence and the claimed invention, i.e., objective evidence of nonobviousness must be attributable to the claimed invention, see MPEP 2144.08. The weight attached to evidence of secondary considerations by the examiner will depend upon its relevance to the issue of obviousness and the amount and nature of the evidence, see MPEP 716.01(b). Note the great reliance placed on this type of evidence by the Supreme Court in upholding the patent in *United States v. Adams*, 383 U.S. 39, 148 USPQ 479 (1966). To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n. 42 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986).

7. Further concerning the alloying ranges, the nonobviousness of a broader claimed range can be supported by evidence based on unexpected results from testing a narrower range if one of ordinary skill in the art would be able to determine a trend in the exemplified data which would allow the artisan to reasonably extend the probative value thereof. *In re Kollman*, 595

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F.2d 48, 201 USPQ 193 (CCPA 1979). However, in the instant case, it is unclear a trend has been established.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCM 

September 20, 2007


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